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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,542	09/10/2003	James J. Logothetis	007227/00273	3069
27383	7590	07/19/2005	EXAMINER	
CLIFFORD CHANCE US LLP			TAKAOKA, DEAN O	
31 WEST 52ND STREET			ART UNIT	
NEW YORK, NY 10019-6131			PAPER NUMBER	
			2817	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/659,542	Applicant(s) LOGOTHETIS, JAMES J.	
	Examiner Dean O. Takaoka	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 20 and 21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-19 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 8-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

Claims 20 and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on June 13, 2005.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Ammar (U.S. Patent No. 6,707,348).

Claim 1:

Ammar shows a coupling assembly (Fig. 9) comprising a plurality of substrate layers (90, 99) and a flange layer (94) bonded together in a stacked arrangement where the substrate layers are positioned on top of a flange layer (90 and 99 positioned on top of 94) and the substrate layers comprising embedded signal processing circuitry (microstrip launchers 92); a signal input (52 – Fig. 7) and a signal output (signal launchers 92) each coupled to the embedded signal processing circuitry (where

microstrip lines connected to 92 are embedded or between substrates 90 and 99; best shown in Fig. 8B); and a cavity (98) formed through an area of the plurality of substrate layers; the cavity exposing signal connection terminals (92) coupled to the signal processing circuitry (microstrip lines connected to 92) to enable the addition of a circuit element (amplifiers 62, 66, 54; divider 56; and resistor) to the assembly and to enable coupling of the added circuit elements to the signal processing circuitry.

It is the position of the Examiner where the limitations "fusion bonding" and "after bonding of the flange and substrate layers" are regarded as process claim limitations (e.g. product by process) where in the case of product claims, only the final product is patentable. Accordingly the limitations drawn to the process have not been given patentable weight.

Regarding the "product-by-process" claims, it should be noted that a "product-by-process" claim is directed to the product per se, no matter how such a product was made. It has been well established by the Courts that it is the patentability of the final product per se which must be determined in a "product-by-process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product-by-process" form or not.

See *In re Hirao*, 190 USPQ 15 at 17 (footnote 3); *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessman*, 180 USPQ 324, *In re Avery*, 186 USPQ 161; *In re Marosi et al.*, 218 USPQ 289; and in particular *In re Thorpe*, 227 USPQ 964. It

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should be noted that the applicant has the burden of proof in such cases, as the above case law makes clear.

Claim 2:

A first signal processing circuitry coupled to the signal input and to a first signal connection terminal exposed within the cavity; and a second signal processing circuitry coupled to the signal output and to a second signal connection terminal exposed within the cavity (where launchers 92 comprise the input from amplifiers 60/66 in Fig. 65 or amplifiers 80 in Fig. 6 and further connected to the summed output shown in Figs. 5 and 6).

Claim 3:

Where the first and second embedded signal processing circuitry further comprise microwave coupler circuitry.

Claim 4:

Where the first and second embedded signal processing circuitry further comprise impedance matching circuitry (56a – Fig. 5 and Fig. 7).

Claim 6:

Where the assembly is configured for an addition of an added circuit element (amplifiers 62, 66, 54 – Fig. 7) selected from the group consisting of from a microwave circuit (Markush group).

Claim 7:

Further comprising a plurality of conductive terminals exposed within the cavity (92) and coupled to conductive terminals on an exterior surface of the assembly

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(connected to divider 56 located on the exterior – Fig. 8A) to provide for signal connections between a circuit element added to the cavity and external signal sources (all connected to cavity elements 92 and external element 56).

Allowable Subject Matter

Claims 14 – 19 are allowed.

Claims 5 and 8 – 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brady – shows a coupling assembly and cavity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O. Takaoka whose telephone number is (571) 272-1772. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Dawn Hada". The signature is fluid and cursive, with the first name "Dawn" and last name "Hada" clearly distinguishable.

dot
July 11, 2005